AMENDMENTS TO THE CLAIMS

1. (CURRENTLY AMENDED) A sample element comprising:

first and second substantially parallel faces ~~separated by an intermediate member~~, the parallel faces ~~and the intermediate member~~ at least partially defining a sample chamber configured to hold a volume of fluid, the sample chamber being reagentless;

an optical path extending through the parallel faces and the ~~intermediate member~~ sample chamber, such that electromagnetic radiation can propagate through the sample chamber; and

an identifying compound disposed ~~within or on at least one of the parallel faces,~~ in the optical path;

the identifying compound having at least one indexed optical absorbance feature, such that spectral analysis of electromagnetic radiation propagated through the ~~sample chamber~~ identifying compound yields the indexed optical absorbance feature;

~~wherein detection of the indexed optical absorbance feature in electromagnetic radiation propagated through the sample chamber indicates to an analyte detection system whether the sample element is configured for use with the analyte detection system.~~

the identifying compound being disposed within or on at least one of the parallel faces and separated from the sample chamber such that the identifying compound does not intermingle with the sample fluid.

2. (ORIGINAL) The sample element of Claim 1, wherein the first and second substantially parallel faces are at least partially transmissive to electromagnetic radiation.

3. (ORIGINAL) The sample element of Claim 1, wherein the parallel faces are at least partially transmissive to infrared electromagnetic radiation.

4. (ORIGINAL) The sample element of Claim 1, wherein the indexed optical absorbance feature is adjacent to or overlapping an absorbance feature of an analyte detectable by the analyte detection system.

5. (ORIGINAL) The sample element of Claim 4, wherein the analyte detectable by the analyte detection system is glucose.

6. (ORIGINAL) The sample element of Claim 1, wherein the indexed optical absorbance feature is an absorbance maximum or an absorbance minimum.

7. (ORIGINAL) The sample element of Claim 1, wherein the identifying compound is a hydrocarbon.

8. (ORIGINAL) The sample element of Claim 1, wherein the identifying compound is a coating on at least a portion of the sample element.

9. (CURRENTLY AMENDED) A sample element comprising:

an optical path for determining analyte concentration; and

an identification key in the optical path, the identification key ~~configured to indicate~~comprising a physical property of the sample element ~~in the optical path~~.

10. (ORIGINAL) The sample element of Claim 9, wherein the physical property is an optical absorption of a window in the optical path.

11. (ORIGINAL) The sample element of Claim 9, wherein the physical property is a thickness of a window in the optical path.

12. (CURRENTLY AMENDED) The sample element of Claim 9, wherein the physical property is a thickness of [[a]] said sample chamber in the optical path.

13. (ORIGINAL) The sample element of Claim 9, wherein the physical property is a background optical absorbance spectrum of the optical path.

14. (ORIGINAL) A sample element for use with an analyte detection system, the sample element comprising:

a sample chamber; and

an identification key that is located within or on the sample element and that is configured to indicate to the analyte detection system a qualification state of the sample element.

15. (ORIGINAL) The sample element of Claim 14, wherein the identification key is configured to indicate a qualification state in which the sample element is configured for use with the analyte detection system.

16. (ORIGINAL) The sample element of Claim 14, wherein the identification key comprises a compound having an optical absorbance spectrum with a qualifying optical absorbance feature.

17. (ORIGINAL) The sample element of Claim 16, wherein the qualifying optical absorbance feature is adjacent to or overlapping an absorbance feature of an analyte detectable by the analyte detection system.

18. (ORIGINAL) The sample element of Claim 17, wherein the analyte detectable by the analyte detection system is glucose.

19. (ORIGINAL) The sample element of Claim 16, wherein the qualifying optical absorbance feature is an absorbance maximum or an absorbance minimum.

20. (ORIGINAL) The sample element of Claim 16, wherein the compound comprises a hydrocarbon.

21. (ORIGINAL) The sample element of Claim 14, wherein the identification key has a structure configured to mechanically engage a complimentary structure in the analyte detection system, such that mechanical engagement of the sample element with the analyte detection system indicates to the analyte detection system a qualification state of the sample element in which the sample element is configured for use with the analyte detection system.

22. (ORIGINAL) The sample element of Claim 21, wherein the identification key structure is a physical shape.

23. (ORIGINAL) The sample element of Claim 21, wherein the identification key structure comprises pins, and wherein the complimentary structure comprises slots.

24. (ORIGINAL) The sample element of Claim 14, wherein the identification key comprises an identification medium within or applied on the sample element.

25. (ORIGINAL) The sample element of Claim 24, wherein the identification medium comprises a bar code.

26. (ORIGINAL) The sample element of Claim 24, wherein the identification medium comprises a magnetic strip.

27. (ORIGINAL) The sample element of Claim 14, wherein the identification key comprises an electrical conductor configured to close an electronic circuit in the analyte detection system when the sample element is coupled to the analyte detection system.

28. (ORIGINAL) The sample element of Claim 27, wherein closing the electronic circuit indicates to the analyte detection system a qualification state of the sample element in which the sample element is configured for use with the analyte detection system.

29. (ORIGINAL) The sample element of Claim 27, wherein measuring an electrical resistance of the electrical conductor indicates to the analyte detection system a qualification state of the sample element.

30. (ORIGINAL) The sample element of Claim 27, wherein measuring an electrical capacitance of the electrical conductor indicates to the analyte detection system a qualification state of the sample element.

31. (CURRENTLY AMENDED) A method for determining an analyte concentration in a material sample disposed in a sample element, the method comprising:

~~inserting the material sample into a sample element;~~

~~inserting~~receiving the sample element in[[~~to~~]] an analyte detection system;

after said receiving, qualifying the sample element ~~to determine~~by determining whether the sample element is ~~compatible~~of a type which is suitable for use with the analyte detection system; ~~and~~

if the sample element is of a type which is suitable for use with the analyte detection system, analyzing an optical property of the material sample[[.]]; and

if the sample element is not of a type which is suitable for use with the analyte detection system, refusing to analyze an optical property of the material sample.

32. (ORIGINAL) The method of Claim 31, wherein qualifying the sample element comprises checking whether an element qualifying structure of the sample element can be engaged with a corresponding structure of the analyte detection system.

33. (ORIGINAL) The method of Claim 32, wherein the element qualifying structure comprises a grooved portion and the corresponding structure comprises a tongue portion, such that the tongue portion engages the grooved portion when the sample element is coupled to the analyte detection system.

34. (ORIGINAL) The method of Claim 31, wherein qualifying the sample element comprises:

measuring an optical absorbance spectrum of the sample element; and

analyzing the measured optical absorbance spectrum for a qualifying absorbance feature.

35. (ORIGINAL) The method of Claim 34, wherein the qualifying absorbance feature is an absorbance maximum or an absorbance minimum.

36. (ORIGINAL) The method of Claim 31, wherein qualifying the sample element comprises reading at least one datum from an identification medium.

37. (ORIGINAL) The method of Claim 36, wherein qualifying the sample element further comprises checking whether the datum corresponds to a datum stored in the analyte detection system.

38. (ORIGINAL) The method of Claim 36, wherein the identification medium comprises a bar code.

39. (ORIGINAL) The method of Claim 36, wherein the identification medium comprises a magnetic strip.

40. (ORIGINAL) The method of Claim 31, wherein qualifying the sample element comprises electronically connecting an electrical conductor of the sample element to the analyte detection system.

41. (NEW) The sample element of Claim 9, further comprising:

a reagentless sample chamber in said optical path.

42. (NEW) A method for qualifying a sample element, the method comprising:

receiving a sample element in an analyte detection system;

after said receiving, qualifying the sample element by determining whether the sample element is of a type which is suitable for use with the analyte detection system;

if the sample element is of a type which is suitable for use with the analyte detection system, analyzing an optical property of the material sample; and

if the sample element is not of a type which is suitable for use with the analyte detection system, refusing to analyze an optical property of the material sample.

43. (NEW) The method of Claim 42, wherein qualifying the sample element by determining whether the sample element is of a type which is suitable for use with the analyte detection system comprises:

determining whether the sample element is an authorized sample element.

44. (NEW) The method of Claim 42, wherein qualifying the sample element by determining whether the sample element is of a type which is suitable for use with the analyte detection system comprises:

determining whether the sample element is an authorized sample element.

45. (NEW) The sample element of Claim 14, wherein the sample chamber is reagentless.